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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,554	03/30/2004	Joachim Eldring	P00820-US1	3404
3017	7590	12/01/2004	EXAMINER	
BARLOW, JOSEPHS & HOLMES, LTD. 101 DYER STREET 5TH FLOOR PROVIDENCE, RI 02903			PETKOVSEK, DANIEL J	
			ART UNIT	PAPER NUMBER
			2874	

DATE MAILED: 12/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/812,554

Applicant(s)

ELDRING ET AL.

Examiner

Daniel J Petkovsek

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on IDS filed August 26, 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☒ Claim(s) 5-10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on March 30, 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/26/04
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

This application is a divisional of U.S. Patent Application 10/152,701, filed May 22, 2002, which is now U.S. Patent No. 6,757,308.

Information Disclosure Statement

1. The prior art documents submitted by Applicant in the Information Disclosure Statements filed on August 26, 2004, have been considered and made of record (note attached copy of forms PTO-1449).

Specification

2. The disclosure is objected to because of the following informalities: it is noted that the cross-reference to related applications must contain the most recent patent information. The U.S. *Patent* Number must be shown (if known), **not** the U.S. *Application* Number.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Sauter et al.

U.S.P. No. 6,056,448.

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Sauter et al. U.S.P. No. 6,056,448 teaches (ABS, Figs. 1-3, columns 3 and 4) an optical subassembly (and inherent method of making same) comprising: mounting an array of optoelectronic devices 30 (VCSEL chip) to a metallic plate 44 (PCB), aligning a lens frame 102 containing a lens array 112 in at least the X and Y direction with respect to the array of optoelectronic devices 30, and fixing the lenses to the PCB, which clearly, fully meets Applicant's claimed limitations.

Regarding claims 2 and 4, see column 3, line 65 through column 4, line 15 for hermetically sealing the package and using laser welding to join the components.

Regarding claim 3, the lenses must be aligned at the correct angle in order to properly align the optoelectronic devices with the lens array.

5. Claims 1 and 3 are rejected under 35 U.S.C. 102(e) as being anticipated by Giboney et al. US 2003/0091302 A1.

Giboney et al. US 2003/0091302 A1 teaches (ABS, Figs. 2A, 2B, [0025]-[0033]) an optical assembly (and inherent method of making) comprising: mounting an array of optoelectronic devices 217 to an IC metallic plate 219, aligning a lens frame 214 containing a lens array 224 in at least the X and Y directions with respect to the optoelectronic devices 217, and affixing the lens frame 214 to the plate, which clearly, fully meets Applicant's claimed limitations.

Regarding claim 3, the lens frame 214 must be aligned at the correct angle in order to properly align the optoelectronic devices with the lens array.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Giboney et al. US 2003/0091302 A1 as applied to claim 1 above, and further in view of Sauter et al. U.S.P. No. 6,056,448.

Giboney et al. US 2003/0091302 A1 teaches (ABS, Figs. 2A, 2B, [0025]-[0033]) an optical assembly (and inherent method of making) comprising: mounting an array of optoelectronic devices 217 to an IC metallic plate 219, aligning a lens frame 214 containing a lens array 224 in at least the X and Y directions with respect to the optoelectronic devices 217, and affixing the lens frame 214 to the plate. Giboney et al. '302 does not explicitly teach hermetically sealing the optical components or affixing the components together by welding.

Sauter et al. U.S.P. No. 6,056,448 teaches (ABS, Fig. 4, column 3, line 65 through column 4, line 15) an optical subassembly (and inherent method of making same) comprising: mounting an array of optoelectronic devices to a PCB, aligning a lens frame containing a lens array in at least the X and Y direction with respect to the array of optoelectronic devices, and fixing the lenses to the PCB. Sauter et al. also teach hermetically sealing the device (for improved coupling and less error) and affixing components together by welding.

Since Giboney et al. '302 and Sauter et al. '448 are both from the same field of endeavor, the purpose disclosed by Sauter et al. '448 (hermetic sealing of component, laser welding to join components) would have been recognized in the pertinent art of Giboney et al. '302.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use hermetical sealing (claim 2) for the purpose of protecting the optical components, and to use laser welding (claim 4) to join and retain the components for the proper connectivity in the optical arts.

Allowable Subject Matter

8. Claims 5-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The relevant prior art of record does not explicitly teach or reasonably suggest the specific method limitations of claim 5 (placing a retainer on a weld plate (including a fiber stub array), aligning the weld plate in the Z direction, and fixing the weld plate to the lens frame). Claims 6-10 depend from claim 5, and as such, are also objected to as being allowable.

Inventorship

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure, with respect to the state of the art of optical subassembly methods: PTO-892 form references A-G.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J Petkovsek whose telephone number is (571) 272-2355. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Daniel Petkovsek
November 22, 2004



AKM ENAYET ULLAH
PRIMARY EXAMINER